

## ABSTRACT

A sensor device for non-invasively measuring a physiological parameter of a patient, such as a pulse oximeter for measuring blood oxygen levels of a patient. In a preferred embodiment, the device comprises a first device portion and a second device portion pivotally connected to the first device portion to define a clamping end of the device. A sensing mechanism is in communication with the clamping end of the device for sensing at least one parameter utilized to determine the blood oxygen level of a patient. A resilient member is disposed between the device portions for biasing the device portions toward each other at the clamping end of the device for clamping an appendage of the patient therebetween. The resilient member further provides a cushion for the appendage at the clamping end of the device. The resilient member thus provides both a biasing component and a cushioning component in a one-piece configuration, thereby eliminating the need for a separate biasing and cushioning elements.